EXHIBIT A

Expert Report

US Steel

Clairton Works Plant

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University of Pittsburgh

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Contents

Problem Statement

The objective of the following study was to develop an estimate of the average walking times from the 3 locker rooms at the US Steel Clairton Works facility: Maple, Wabash and the women's locker rooms, to each of the batteries in the plant. These batteries are the 1-3 Battery, 7-9 Battery, 13-15 Battery, 19-20 Battery and B Battery. For each of the possible routes, the times and distances were computed from the bathhouse entrances to the batteries' foreman offices.

Background

A combination of direct measurement (to measure distances) and a predetermined motion time systems (to estimate step and walking times), were used during the data collection/observation process as follows:

I. **Direct Measurement**: A measuring wheel, accurate to the tenth of a foot, was used to measure the path distances between the three locker rooms (Maple, Wabash, and the Woman's bath house) and each battery station (B, 1-3, 7-9, 13-15, 19-20). Because distances ranged in the thousands of feet, it was reasonably assumed that distances could be rounded to the nearest 5-foot interval. Physical obstacles that would impede the average worker from walking at a normal pace were also observed. The process of collecting data included the use of a site map and a U.S. Steel employee as a guide.

II. **Predetermined Motion Time System**: For changing in and out of the company issued/required uniform, a predetermined motion time system, MOST™, was used to generate a normal time[1]. Normal time can be defined as the time necessary for an average trained worker to perform a task at a normal pace assuming normal working conditions and adequate supervision. The Maynard Operation Sequence Technique (MOST™), developed by Kjell Zandin and H.B. Maynard and Company Inc. in 1974, is a globally accepted predetermined time motion system. These systems are widely used by industrial engineers for establishing time standards across a diverse range of industries and a wide range of tasks. The MOST™ system assigns

[1] Zandin, Kjell B. MOST™. New York: Marcel Dekker, Inc, 1990.

times to all basic forms of movement (step, reach, bend, etc...) using data from tens of thousands of time studies and has been validated at hundreds of company sites worldwide.

Methodology

The team collected the available data during normal operating hours on February 18th, 2010. Present were one of the named plaintiffs in the case, attorneys for the plaintiffs and defendants, a representative from U.S. Steel and the team consisting two industrial engineers. In the interest of comprehensiveness, the team walked on all the paths (that were pointed out to us by our guide) taken by the workers. Possible obstacles, hazards and bottlenecks were observed. The main pathways and branches to each foreman station were measured without duplication – this facilitated the computation of each possible path taken by workers to the foreman stations at the different batteries. A map with all the measured distances (for each main pathway and branch) can be found in Appendix A. Using MOST™ analysis, which states that an average step is 2.5 feet, total steps along a route could be calculated. Steps, which have an index value of 20 time measurement units (TMUs), could then be converted into conventional time units (1 sec = 25.4 TMUs). Because stairs are treated as individual steps in MOST™ (overrides of the distance of each step), the number of stairs along each route were also counted and combined with the normal walking steps. This methodology facilitated accurate computation of estimated walking times.

It must be noted here that that these computations are relied upon by experts in the field of industrial engineering. Further, we have applied the principles and methods reliably to the facts of the case based on our best judgment.

Results and Analysis

A map with all the measured distances (for each main pathway and branch) can be found in Appendix A. It must be noted that, while there are multiple routes from any given bathhouse to battery, only the best (a combination of shortest and safest) routes were computed, as workers should not be compensated for unnecessary walking. It was assumed that each route the guide provided the team was the best route possible to that battery. Distances from each bathhouse to all batteries were then averaged to generate an average walking time. All calculated paths, as

well as average times from each bathhouse to the five batteries can be found below in Figure 1. It must be noted that, given the layout of this facility, every route includes outdoor paths. Thus, weather conditions could presumably affect the average walking times. This issue will be addressed in further detail at the conclusion of the work measurement analysis. It must also be noted that these measurements were conducted by a MOST™ certified team member.

		Maple Bath House	Wabash Bath House	Women's Bath House		Average
B-Battery	Walk Dist (feet)	4220	2950	2005		3058.33
	Stairs	18	18	18		18.0
	Time (min)	22.39	15.72	10.76		**16.29**
1-3 Batt	Walk Dist	1875	3145	785		2001.67
	Stairs	15	15	15		15.0
	Time	10.04	16.71	3.27		**10.70**
7-9 Batt	Walk Dist	2100	3370	1010		2226.67
	Stairs	33	33	33		33.0
	Time	11.46	18.12	5.73		**12.12**
13-15 Batt	Walk Dist	2930	1660	2780		2448.33
	Stairs	33	33	33		33.0
	Time	15.81	9.15	15.03		**13.29**
19-20 Batt	Walk Dist	2885	1615	3395		2558.67
	Stairs	17	17	17		17.0
	Time	15.37	8.70	18.04		**13.65**
Average	Walk Dist	2802	2548	1995		2448.33
	Stairs	23.2	23.2	23.2		23.2
	Time	**15.01**	**13.68**	**10.57**		13.09

Figure 1. Distances & Normal Walking Times

The last column aggregated the paths taken by workers to a non-weighted average normal walking time and distance. It must also be noted that the average one-way walking times were doubled to account for these actions occurring pre and post shift. Having calculated a normal time, a 15% allowance for personal rest, fatigue, and delay was allocated in order to convert the value into a standard time (this is standard industry practice). This would cover any instances of delay a worker would expect to experience during these activities. Examples include:

- Less-than-ideal path conditions due to weather
- Train crossings
- Bottlenecks at vital points
- Any other minor delays

Therefore, Standard Time = Normal Time * 1.15

Figure 2a and 2b below summarize the one-way and two-way standard times for walking between the bath houses and foreman stations respectively.

One-Way	Maple	Wabash	Women's
B-Batt	22.39	15.72	10.76
1-3 Batt	10.04	16.71	3.27
7-9 Batt	11.46	18.12	5.73
13-15 Batt	15.81	9.15	15.03
19-20 Batt	15.37	8.70	18.04

Figure 2a. Standard One-way walking times in minutes.

Two-Way	Maple	Wabash	Women's
B-Batt	44.78	31.44	21.52
1-3 Batt	20.08	33.41	6.54
7-9 Batt	22.91	36.25	11.47
13-15 Batt	31.63	18.29	30.05
19-20 Batt	30.73	17.40	36.09

Figure 2b. Standard Two-way (round-trip) walking times in minutes

Conclusions & Next Steps

The next logical step here is to establish the time spent in the plant and compare this to the amount paid to each worker. This is a straightforward computation, considering that all of the punch in/out time/day data and payroll records are computer based. A simple computer based algorithm can establish the time spent by each worker in the plant and also compare it to the amount that worker was paid to establish the time/wages due to the worker or to establish that the worker was overpaid. This computation can be accomplished manually but it is likely to be tedious, time-consuming and error-prone.

The data that has been provided thus far in a pdf file format, must first be converted to a machine readable format to ensure accuracy, error free, and timely processing considering that there are approximately 30,000 person days, in the data set provided. Analyzing the data in the format currently provided was not accomplished because the task of converting is error prone and individual manual checks of each data point to establish veracity of the data must be

completed to ensure accuracy. Receipt of the data in a spreadsheet or any machine readable format with delimiters will allow us to complete this analysis.

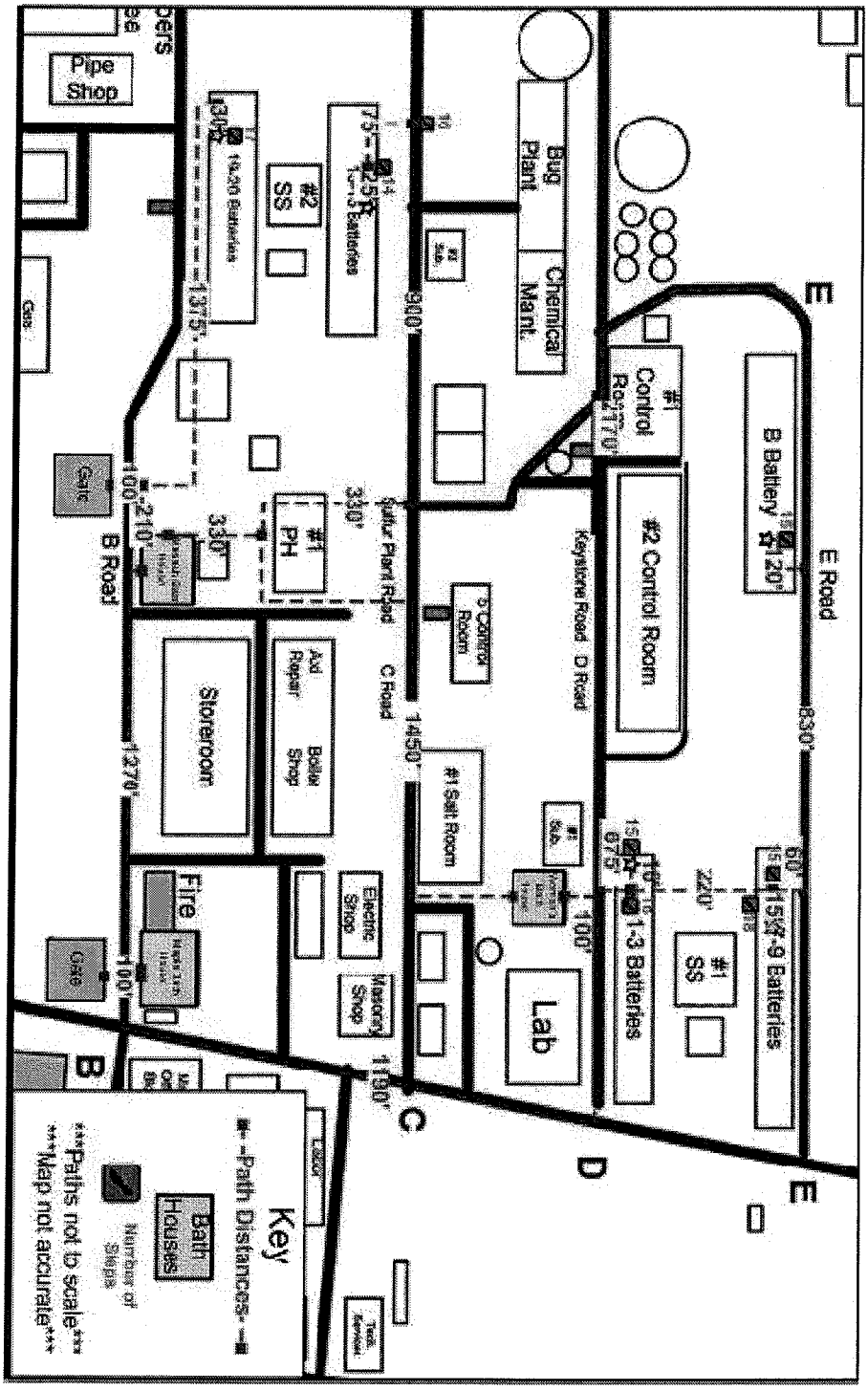
The report summarizes our time estimations and also details the factual basis for our conclusions. It must be noted that our conclusions are based upon established facts and data and are reasonably relied upon by experts in the field of industrial engineering. Further, in our best judgment, our conclusions are the product of reliable principles and methods and these have been reliably applied to the facts of the case, with a reasonable degree of engineering certainty.

Compensation

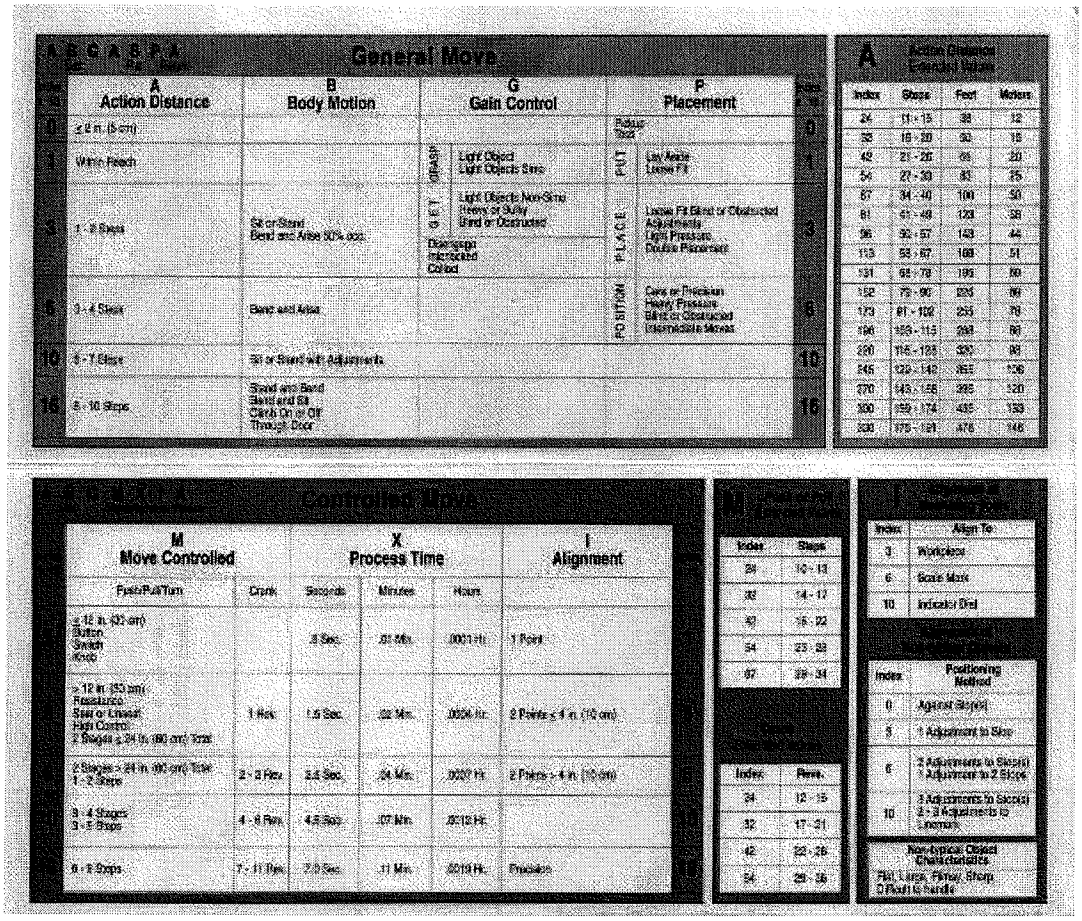
Compensation received for the development of the report was $ 4,400. This compensation represents a total time expended of 32 hours by 2 person team as follows: Site Visit: 6 hours, Analysis: 5 hours, Report: 5 hours.

Appendices

Appendix A


Pipe Shop
Bug Plant
Chemical Maint.
#2 SS
#1 Control Room
B Battery
#2 Control Room
E Road
Gate
B Road
#1 PH
Keystone Road
D Road
C Road
Storeroom
Air Repair
Boiler Shop
#1 Salt Room
#1 SS
1-3 Batteries
4-9 Batteries
Fire
Electric Shop
Masonry Shop
Lab
Key
Path Distances
Bath Houses
Number of Steps
Paths not to scale
Map not accurate

Appendix B



General Move

Index	A Action Distance	B Body Motion	G Gain Control	P Placement
0	≤ 2 in. (5 cm)			Fixed Spot
1	Within Reach		GRASP: Light Object; Light Objects Sims	PUT: Loy Aside; Loose Fit
3	1 - 2 Steps	Sit or Stand; Bend and Arise 50% occ.	GET: Light Objects Non-Sliding; Heavy or Bulky; Bind or Obstructed; Disc-shape; Interlocked; Coiled	PLACE: Loose Fit Bind or Obstructed; Adjustments; Light Pressure; Double Placement
6	3 - 4 Steps	Bend and Arise		POSITION: Care or Precision; Heavy Pressure; Bind or Obstructed; Intermediate Moves
10	5 - 7 Steps	Sit or Stand with Adjustments		
16	8 - 10 Steps	Stand and Bend; Sit and Sit; Climb On or Off; Through Door		

A Action Distance (Constant Values)

Index	Steps	Feet	Meters
24	11 - 13	38	12
28	14 - 17	50	15
32	18 - 22	66	20
36	23 - 26	85	26
37	27 - 33	81	25
37	34 - 40	100	30
61	41 - 49	128	39
86	50 - 57	143	44
113	58 - 67	168	51
131	68 - 78	195	59
152	79 - 90	225	69
173	91 - 102	255	78
196	103 - 115	288	88
220	116 - 128	320	98
245	129 - 142	355	108
270	143 - 156	395	120
300	157 - 174	435	133
330	175 - 191	478	146

Controlled Move

M Move Controlled		X Process Time			I Alignment
Push/Pull/Turn	Crank	Seconds	Minutes	Hours	
≤ 12 in. (30 cm) Button, Switch, Knob		.6 Sec.	.01 Min.	.0001 Hr.	1 Point
> 12 in. (30 cm) Resistance, Start or Linear, High Control, 2 Stages ≤ 24 in. (60 cm) Total	1 Rev.	1.5 Sec.	.02 Min.	.0004 Hr.	2 Points ≤ 4 in. (10 cm)
2 Stages > 24 in. (60 cm) Total, 1 - 2 Steps	2 - 3 Rev.	3.5 Sec.	.04 Min.	.0007 Hr.	2 Points > 4 in. (10 cm)
3 - 4 Stages, 3 - 5 Steps	4 - 6 Rev.	4.5 Sec.	.07 Min.	.0012 Hr.	
6 - 8 Steps	7 - 11 Rev.	7.0 Sec.	.11 Min.	.0019 Hr.	Precision

Index	Steps
28	10 - 13
30	14 - 17
40	18 - 22
54	23 - 28
67	29 - 34

Index	Revs.
24	12 - 16
32	17 - 21
42	22 - 28
54	29 - 36

Index	Align To
3	Workplace
6	Base Mark
10	Indicator Dial

Index	Positioning Method
0	Against Stop(s)
5	1 Adjustment to Stop
6	2 Adjustments to Stop(s); 1 Adjustment to 2 Stops
10	3 Adjustments to Stop(s); 2 - 3 Adjustments to Location

Non-Optical Object Characteristics

Flat, Large, Flimsy, Stays; 2 Pull to Handle